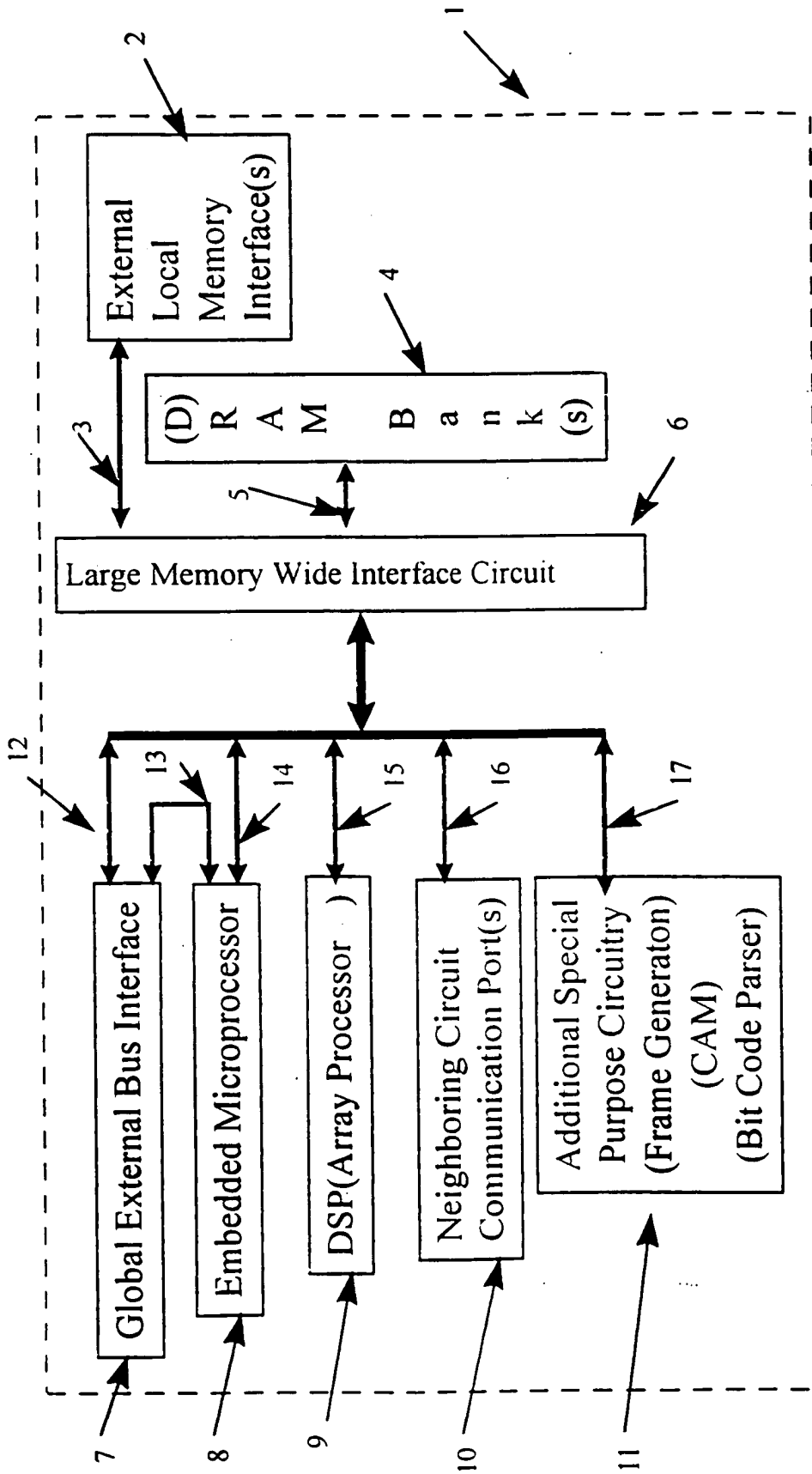


FIG. 1



2-5-11

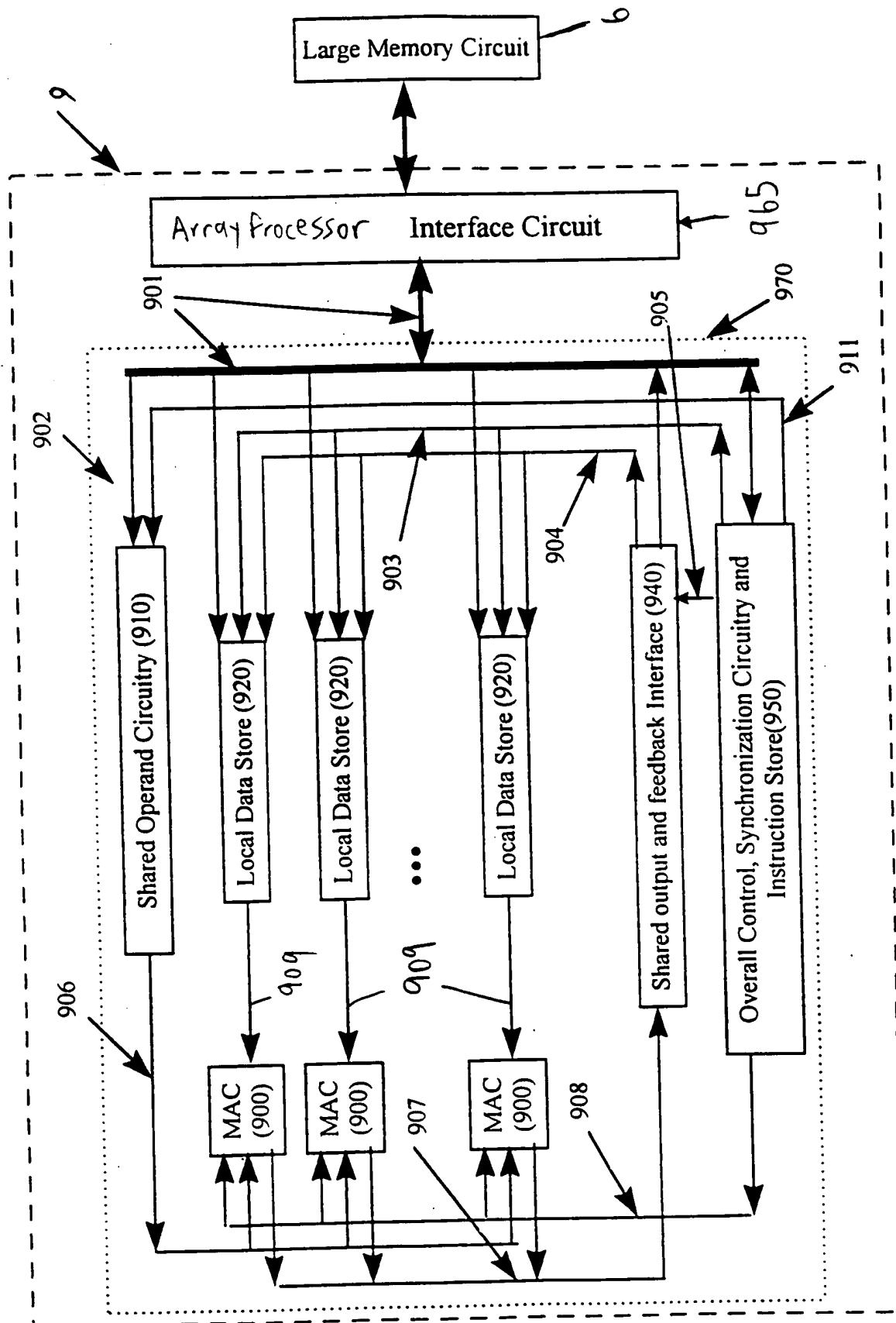


FIG. 3

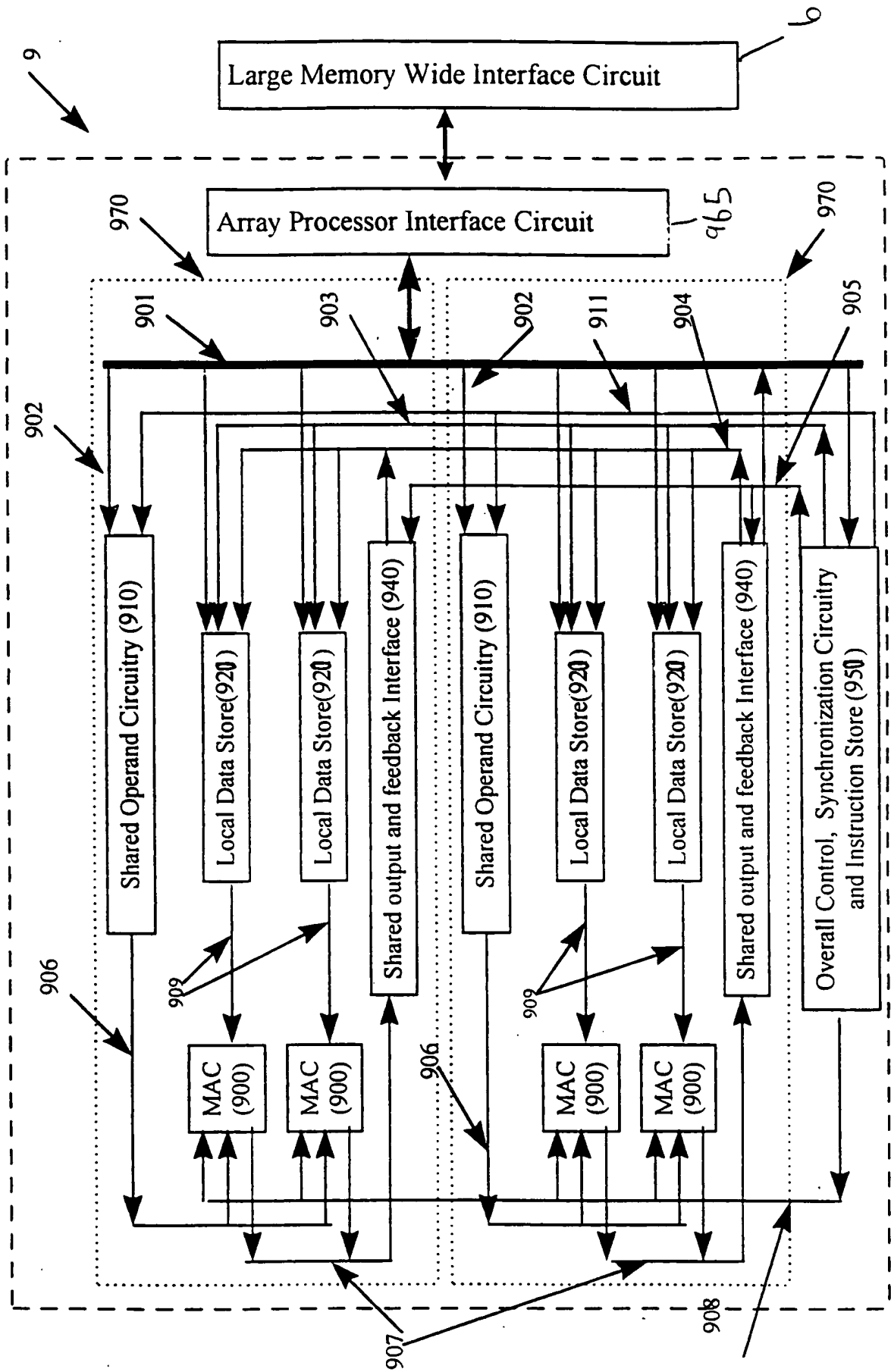


FIG. 4

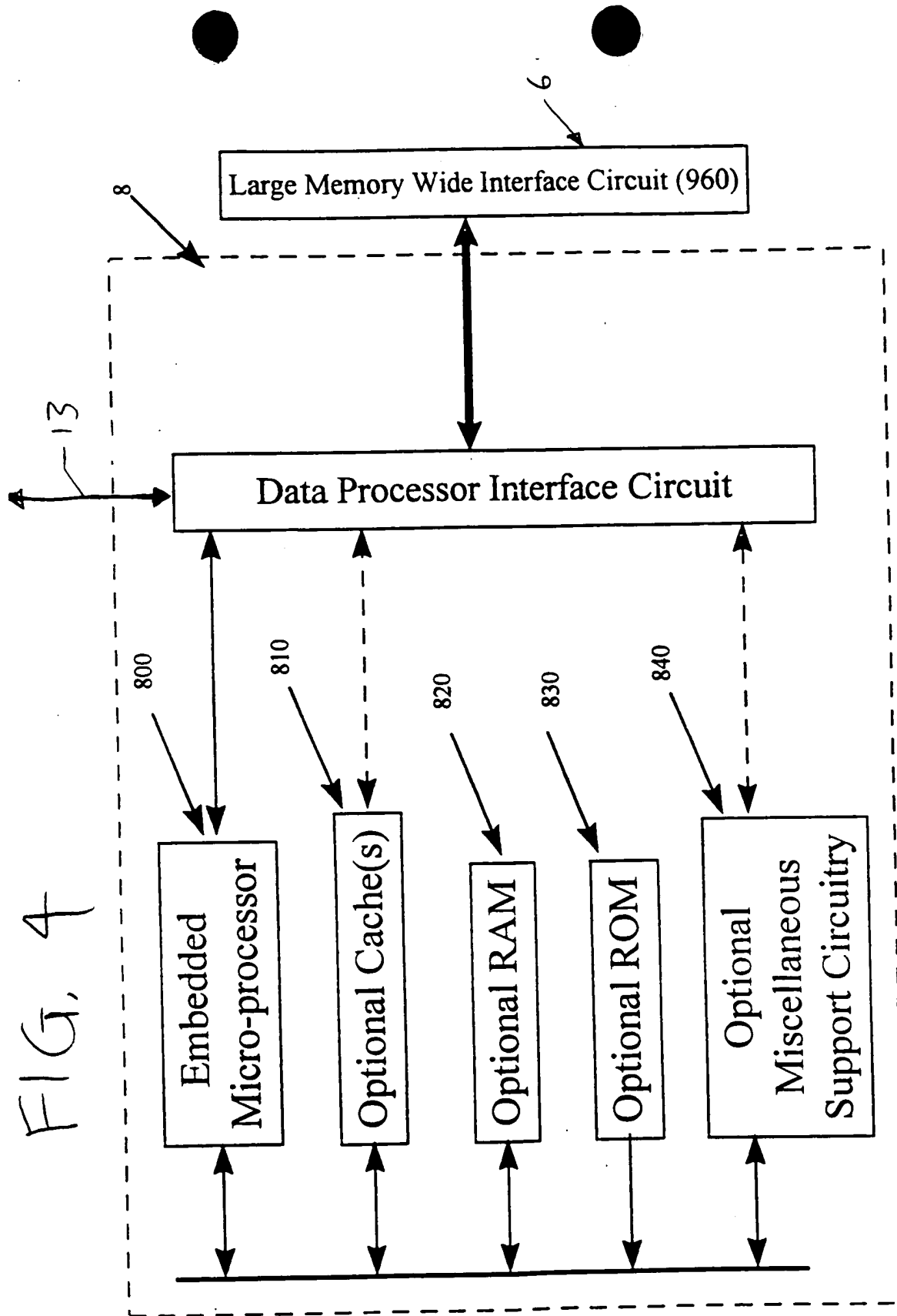


Figure 5: Two instances (1) in One IC (1000)
with independent external memory interfaces

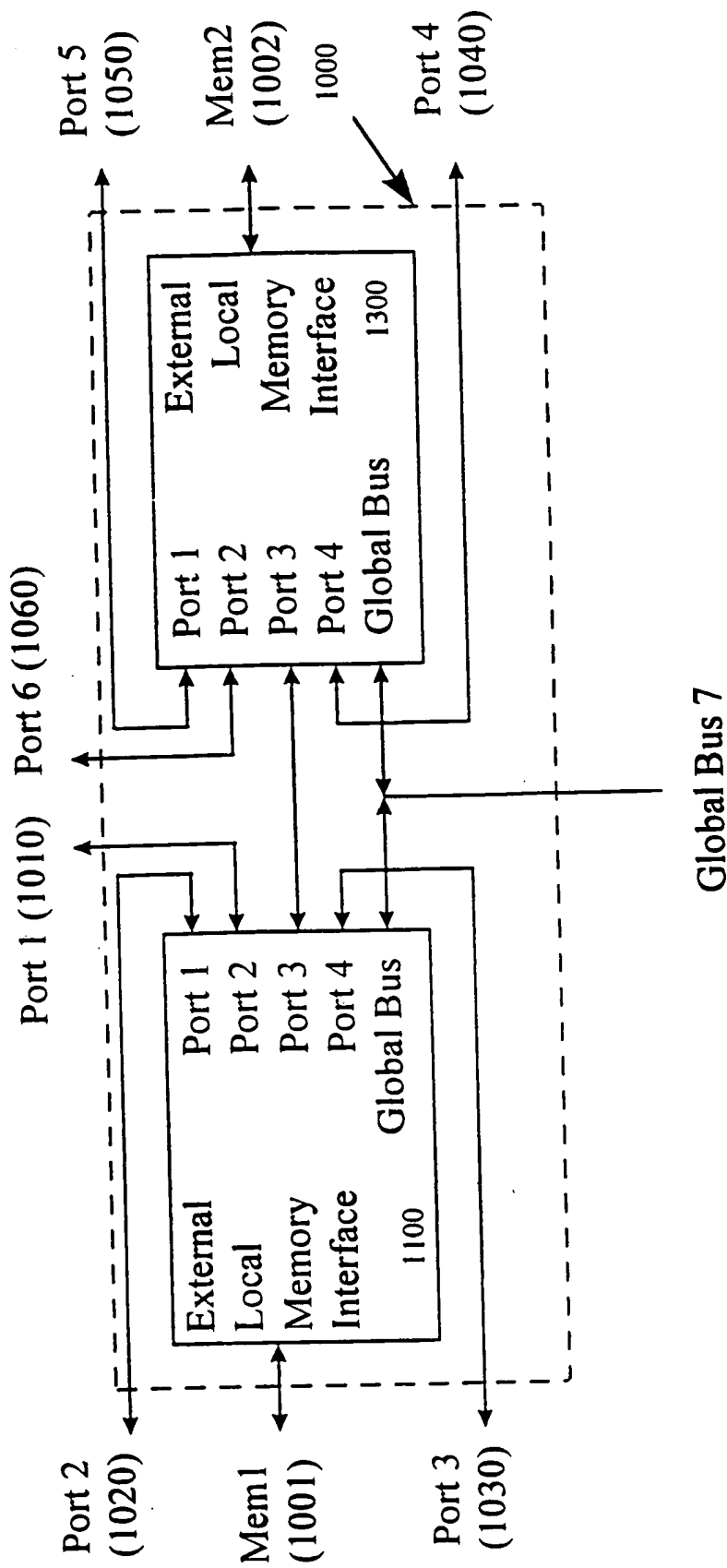


Figure 6: Two instances (1) in One IC (1000)
with shared external memory interface

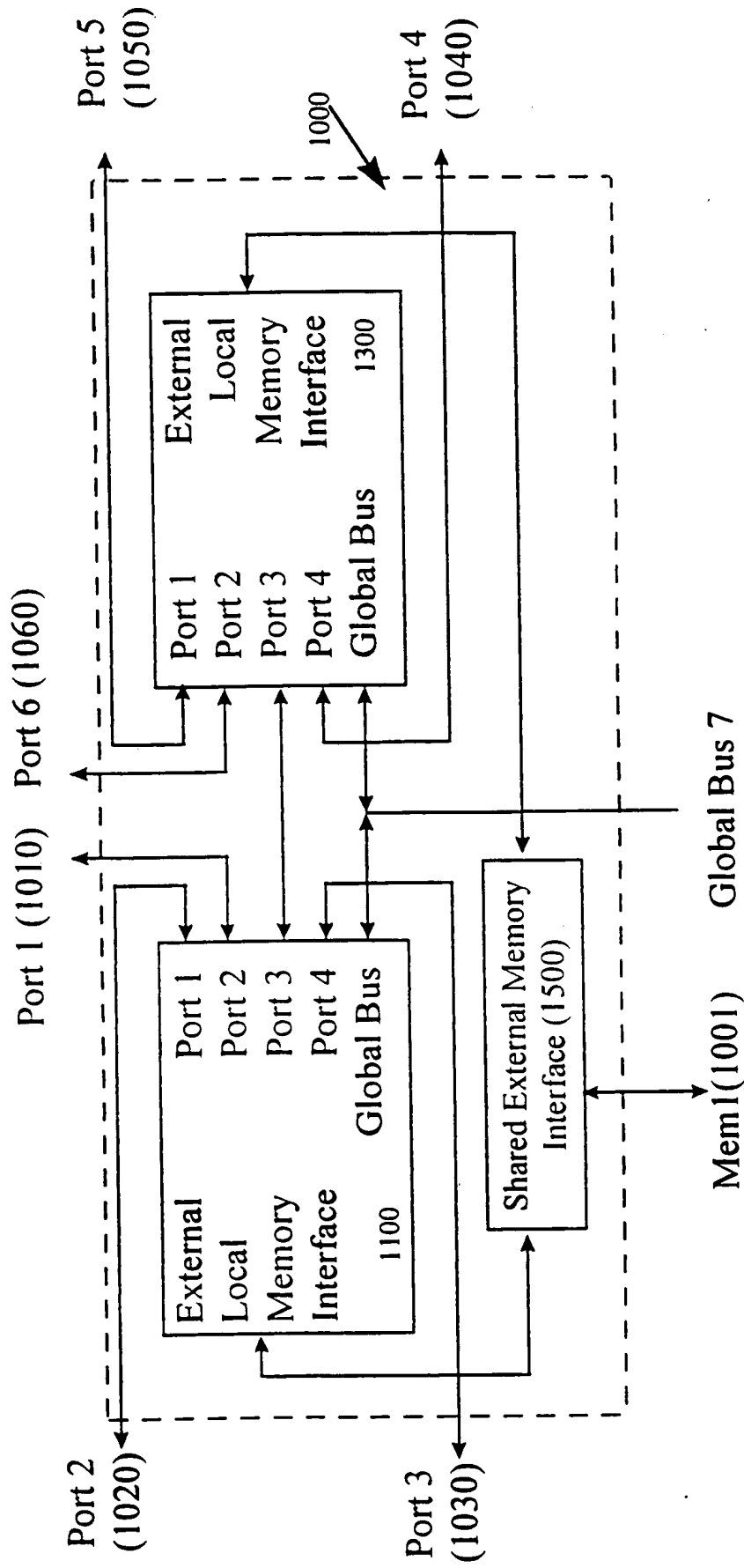


Figure 7: Four instances (1) in One IC (1000)

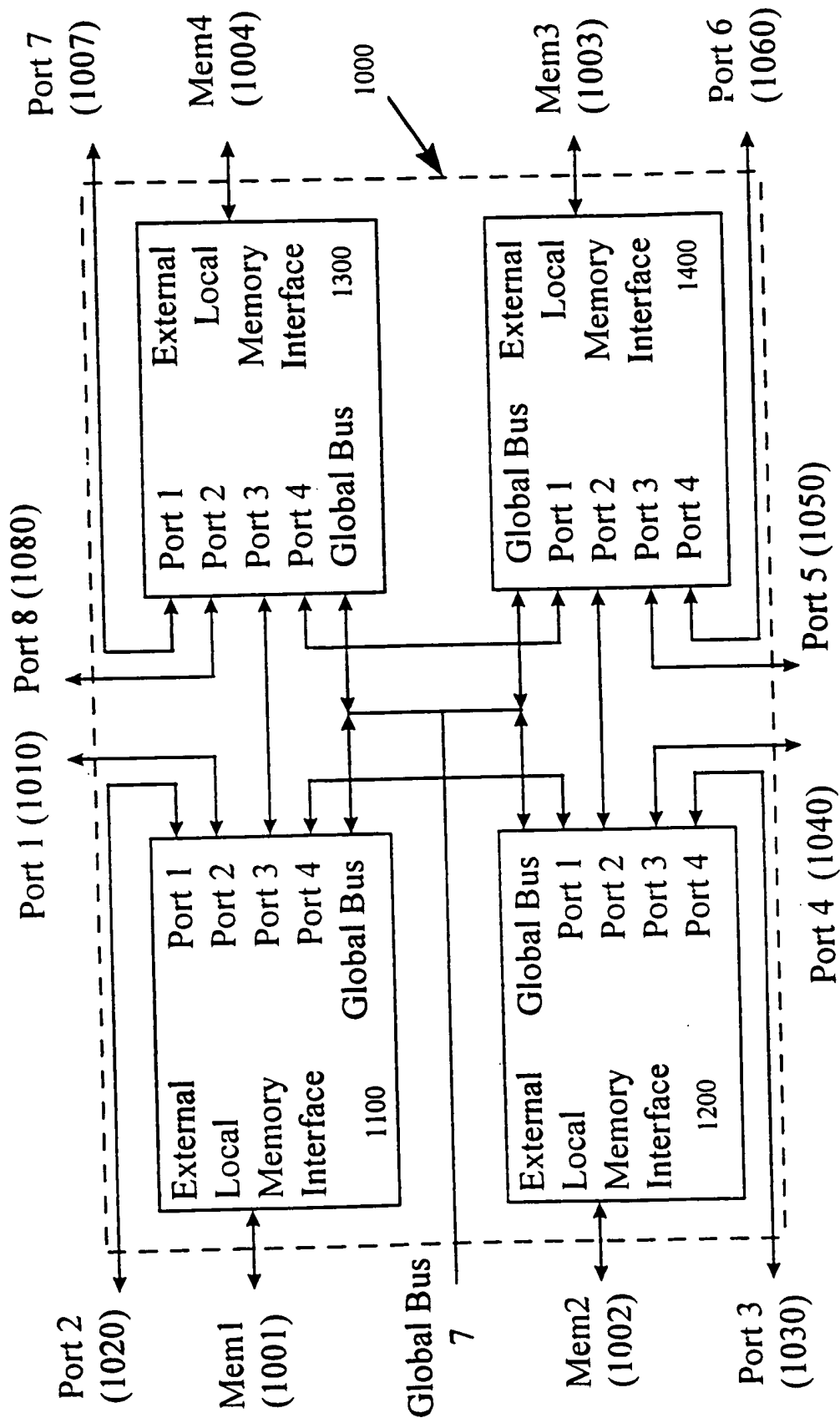


Figure 8: Four instances (1) in One IC (1000)
Sharing one external memory interface

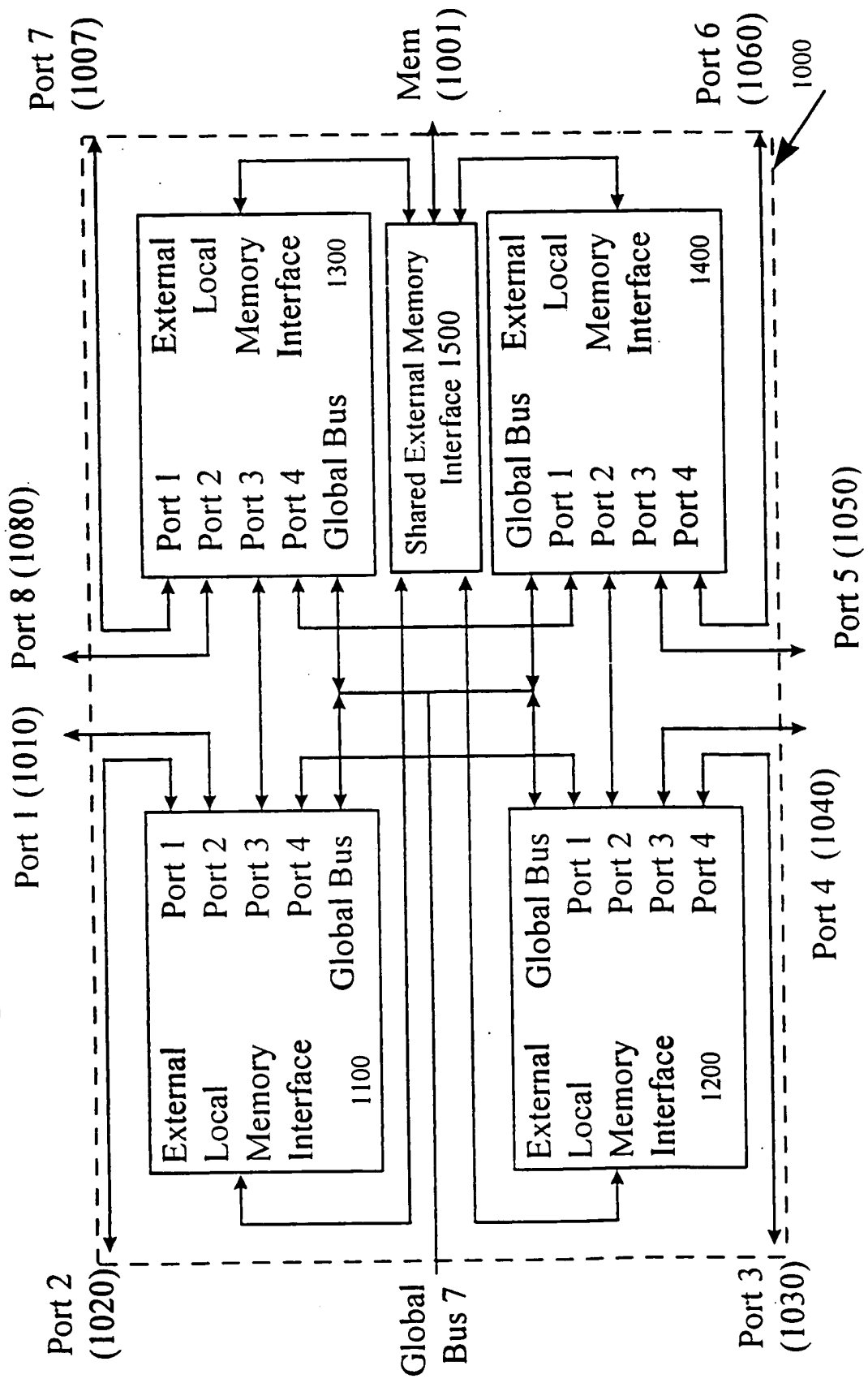


Figure 9: Four instances (1) in One IC (1000)
Sharing two external memory interfaces

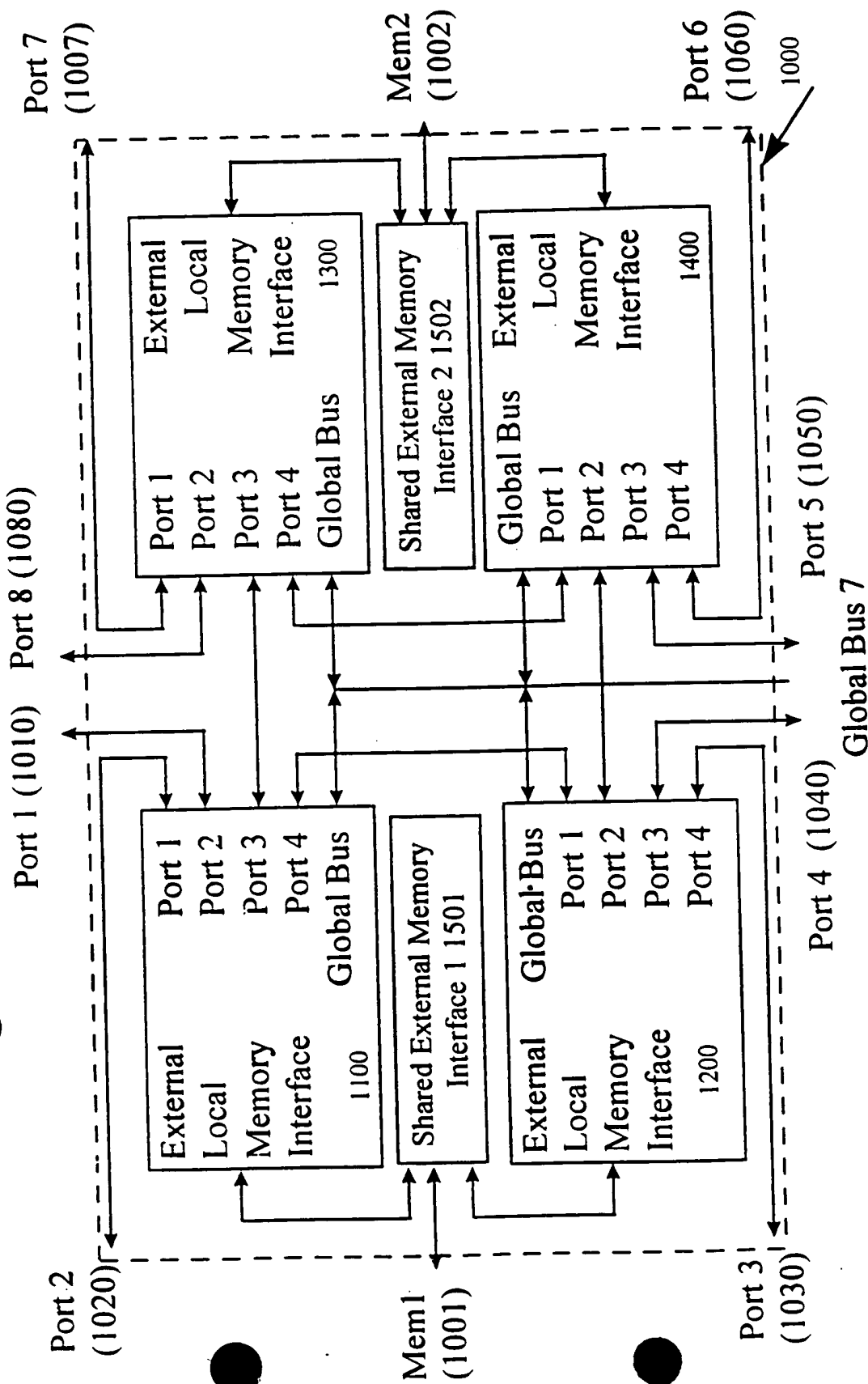


Figure 10: Four instances full direct interconnect external memories in IC sharing 2

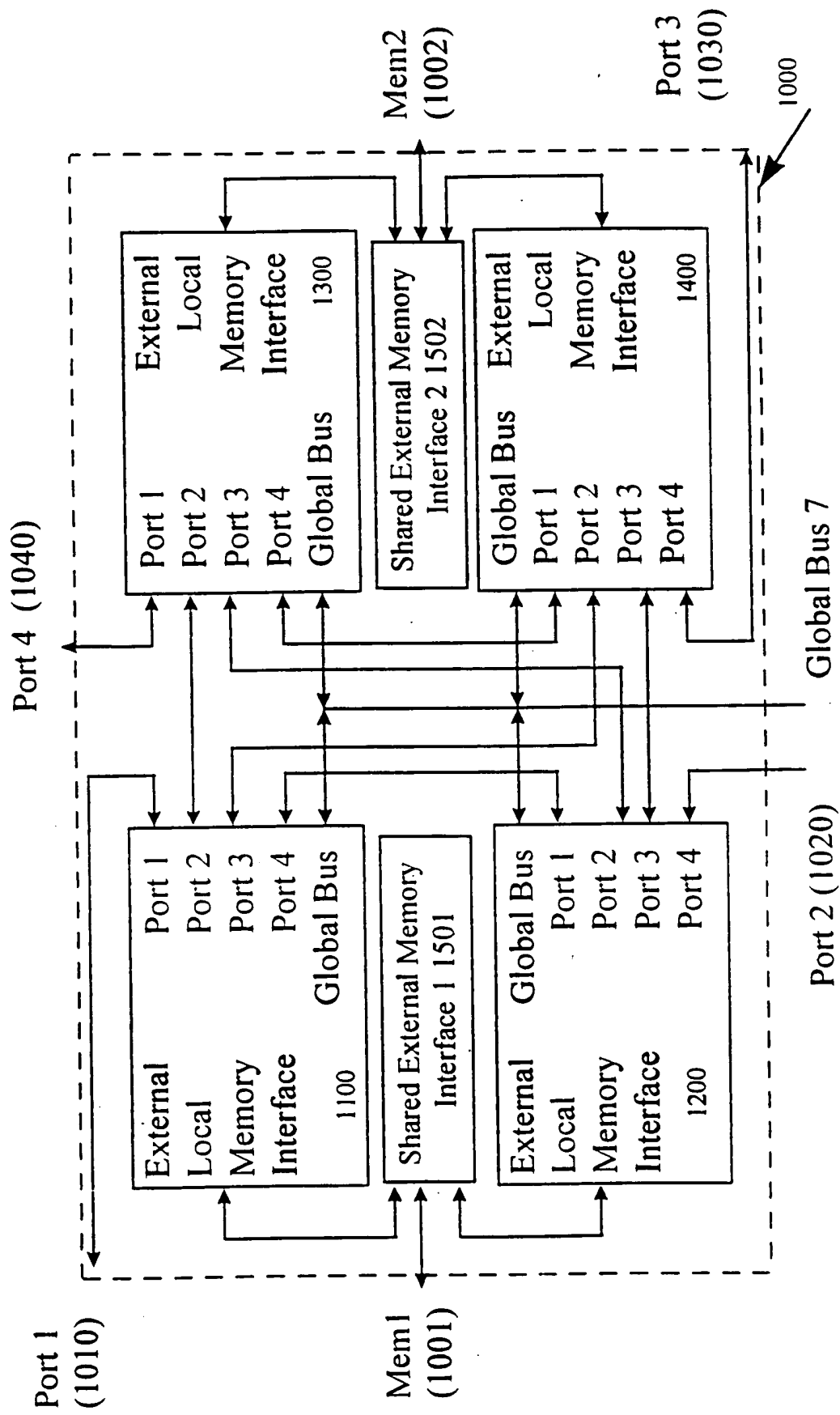


Figure 11: 16 instances on 1 IC with 4 external memories

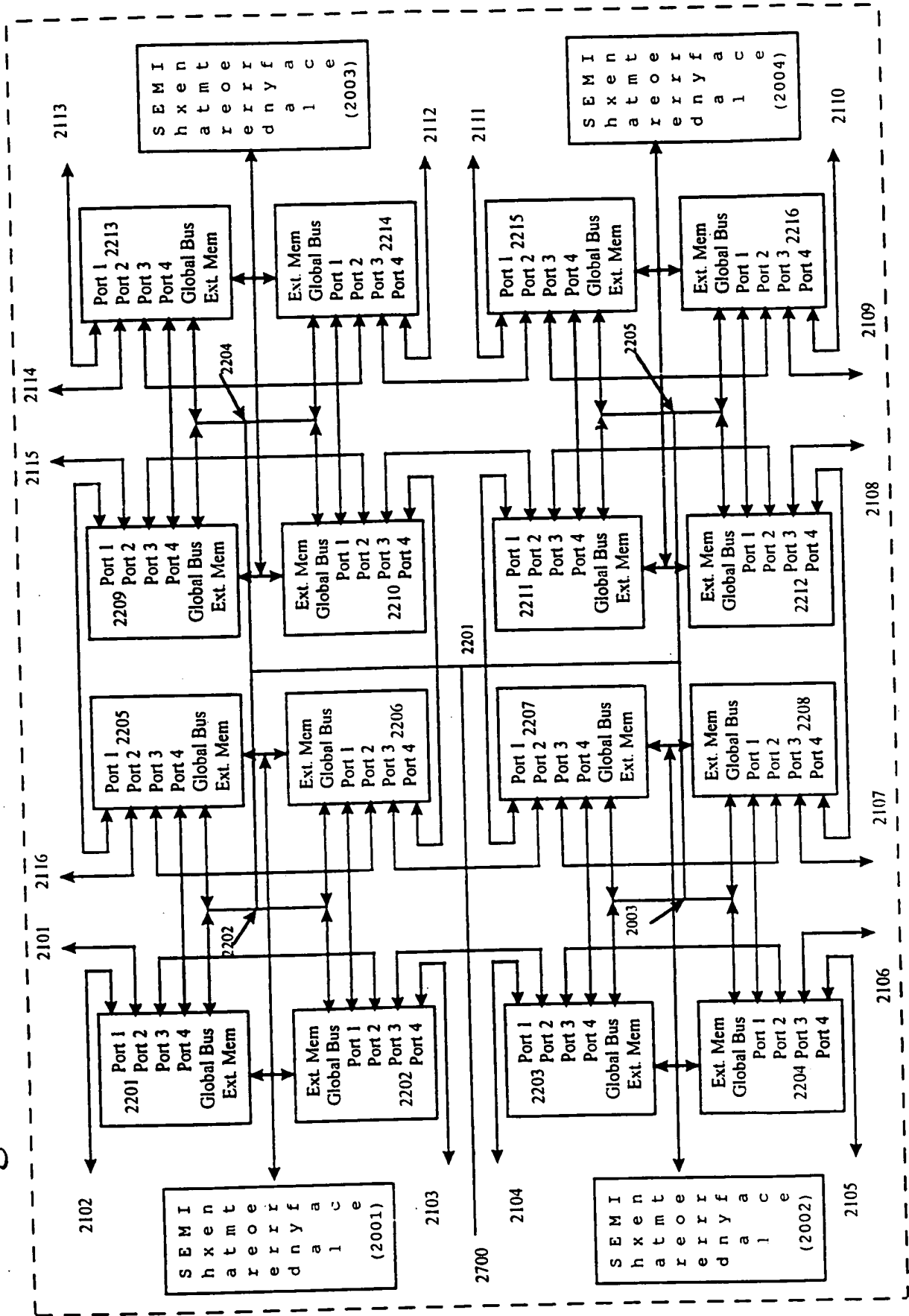


Figure 12: 16 instances on 1 IC with 2 external memories

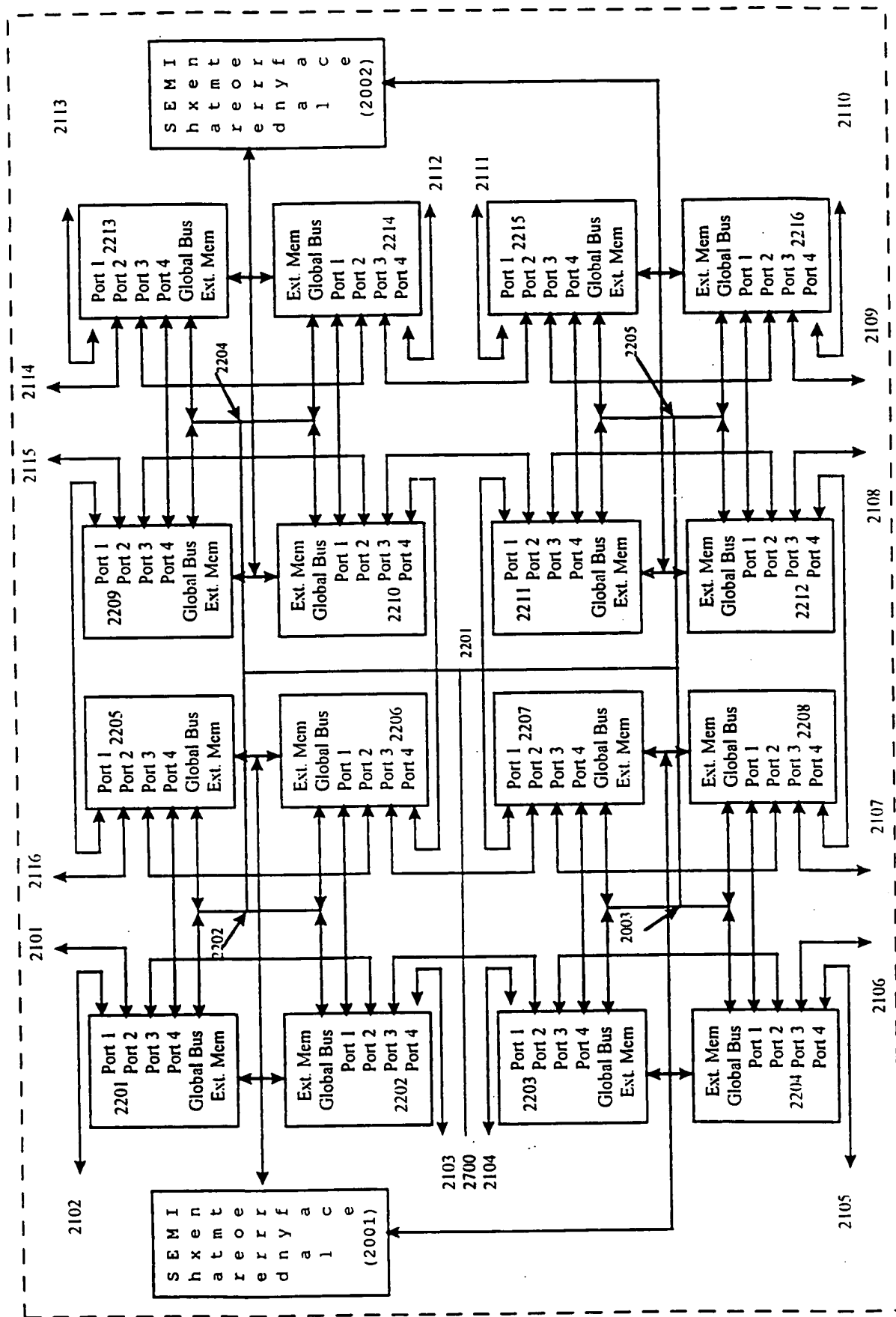


Figure 14: Application PCB Module 2 of Embodiment 1, 1000 or 2000

- Overall PCB Foot print: 125mm*150mm
- Each side of printed circuit board contains:
 - (8) Embodiments
 - (8) Synchronous DRAM Modules (168 pin) with up to 16M by 72 bits each
 - Each Embodiment has 144 Mbytes of RAM
 - Boot ROM and other support circuitry is not diagrammed here

